

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

| | | |
|---|---|----------------------|
| In the Matter of |) | |
| |) | |
| Amendment of the Commission's Rules |) | GN Docket No. 12-354 |
| With regard to Commercial Operations in |) | |
| The 3550-3650 MHz Band |) | |

**COMMENTS OF
NEPTUNO NETWORKS**

NEPTUNO MEDIA, INC. D/B/A NEPTUNO
NETWORKS

Eduardo R. Guzmán
Camillie Landrón
DRINKER BIDDLE & REATH LLP
1500 K Street N.W., Suite 1100
Washington, D.C. 20005
(202) 354-1373

Dated: February 20, 2013

SUMMARY

Neptuno Media, Inc. d/b/a Neptuno Networks (“Neptuno”) is a leading wireless broadband service provider based in Puerto Rico that currently operates in the 3650-3700 MHz Band. Neptuno does not object to the general objective of promoting spectrum sharing and a diversity of commercial broadband services in the 3550-3650 MHz band. Neptuno is deeply concerned, however, with the Commission’s supplemental proposal to integrate the 3650-3700 MHz band (and its current licensees) into the proposed Citizens Broadband framework.

First, Neptuno is concerned that the supplemental proposal to integrate the 3650-3700 MHz band into the proposed Citizens Broadband Service framework is too vague as to certain critical elements (and as to the implications of some of these elements) to allow Neptuno to submit constructive comments. Second, Neptuno is concerned that, based on the information available and the limited understanding of the implications of the supplemental proposal, full integration of the 3650-3700 MHz band into the proposed Citizens Broadband Service framework would cripple the ability of Neptuno and others to continue to operate in the 3650-3700 MHz band and provide the services that they offer now. Finally, Neptuno is concerned that the Commission’s supplemental proposal, if adopted and depending on how it is defined and implemented, may have the effect of modifying the terms of Neptuno’s 3650-3700 MHz license without following the procedures of 47 U.S.C. § 316.

If the Commission wants to pursue the goal of expanding spectrum sharing and small cell deployment in the 3560-3650 MHz band, it should not do so in a manner that does not overhaul the current 3650-3700 MHz band’s regulatory regime or affects the ability of current 3650-3700 MHz licensees to continue to operate as they do now.

TABLE OF CONTENTS

| | |
|--|-----------|
| SUMMARY | ii |
| I. INTRODUCTION..... | 1 |
| II. DISCUSSION | 5 |
| A. The Commission’s Supplemental Proposal Is Too Vague As To Certain Critical Elements To Permit Informed Commenting By Current 3650-3700 MHz Licensees..... | 5 |
| B. Based On The Limited Information Available, Adoption Of The Commission’s Supplemental Proposal Could Cripple Neptuno And Others Already Operating In The 3650-3700 MHz Band. | 9 |
| C. The Commission’s Proposal Could Have The Effect Of Modifying The Licenses Held By Neptuno And Others In The 3650-3700 MHz Band | 13 |
| III. CONCLUSION | 15 |

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

| | | |
|---|---|----------------------|
| In the Matter of |) | |
| |) | |
| Amendment of the Commission's Rules |) | GN Docket No. 12-354 |
| With regard to Commercial Operations in |) | |
| The 3550-3650 MHz Band |) | |

To: The Commission

**COMMENTS OF
NEPTUNO NETWORKS**

Neptuno Media, Inc. d/b/a Neptuno Networks ("Neptuno"), pursuant to Section 1.415(a) of the Commission's Rules, 47 C.F.R. § 1.415(a), submits these Comments in response to the *Notice of Proposed Rulemaking and Order*, FCC 12-148, adopted and released by the Commission on December 12, 2012 ("*NPRM*").

I. INTRODUCTION

Neptuno is a leading wireless service provider based in Puerto Rico. Neptuno offers Layer 2 and Layer 3 MPLS VPNs services, Internet services, VoIP services, network consulting, integration services and managed services to small and medium-sized businesses, government agencies, public and private educational institutions and hospitals, as well as major enterprise customers that require an infrastructure capable of supporting their mission-critical business around Puerto Rico and the U.S. Virgin Islands. Since its foundation in June 2000, Neptuno has grown into a profitable services business by providing quality, reliable and cost-effective solutions to its customers' voice, data and video requirements. Today, Neptuno has thousands of enterprise customers, including the major telecommunications carriers in Puerto Rico.

The 3650-3700 MHz band has been and remains a critical component to Neptuno's success and its ability to provide reliable commercial broadband service in Puerto Rico. The Commission opened the door to the development of the 3650-3700 MHz band in 2005, when it adopted a "licensed light" approach under which prospective operators were given the opportunity to register for ten-year, non-exclusive, nationwide licenses to operate in the band.¹ Licensees are required to register their proposed base stations with the Commission before seeking station authorization and have the duty to examine the database prior to seeking authorization from the Commission.² Although the Commission declined to extend to licensees in the 3650-3700 MHz band the interference protections traditionally associated with exclusive licenses, it did make clear that they "had the mutual obligation to cooperate and avoid harmful interference to one another."³

When these rules were enacted, the Commission proclaimed that the 3650-3700 MHz band was "well-suited to respond to the needs expressed by the growing number of entrepreneurial wireless internet service providers (WISPs)" and expressed its hope that the regulatory framework it was adopting would "provide an opportunity for the introduction of a variety of new wireless broadband services and technologies, such as WiMax."⁴ The Commission concluded at the time that the "minimal" licensing requirements it was adopting would give licensees "maximum flexibility to evolve their systems to meet uncertain future

¹ See *In re Wireless Operation in the 3650-3700 MHz Band, Report and Order and Memorandum Opinion and Order*, 20 FCC Rcd 6502 (2005) ("3650-3700 MHz Report and Order").

² See 47 C.F.R. § 90.1307

³ 3650-3700 MHz Report and Order, 20 FCC Rcd at 6508 (¶ 16); *id.* at 6513 (¶ 31).

⁴ *Id.* at 6503 (¶ 2).

needs and requirements,” would facilitate “cooperation among users,” and would lead to investments in the band.⁵ The Commission stressed that the license being granted in the 3650-3700 MHz band was intended to allow licensees “to provide all allowable services anywhere within their service area at any time, consistent with whatever regulatory status they choose.”⁶

The Commission was right in its assessment of the potential of the 3650-3700 MHz band and the effects of the licensing scheme it was adopting. As the *NPRM* points out, thousands of entities have licenses in the 3650-3700 MHz band with more than 25,000 registered sites.⁷ Neptuno is one of these licensees. Accepting the Commission’s invitation to invest in the 3650-3700 MHz band and deploy innovative technology to offer wireless broadband services, Neptuno requested and was granted a nationwide, non-exclusive license for the 3650-3700 MHz band and has registered several stations in Puerto Rico. Neptuno then partnered with leading providers of WiMax-based wireless broadband solutions to develop a completely independent wireless backbone structure that allows it to offer WiMax solutions for the last mile. The 3650-3700 MHz band worked for these purposes because it allowed Neptuno to offer service-level agreements that are not feasible in bands more vulnerable to interference, and enabled Neptuno to provide a wide range of solutions to customers that require total carrier redundancy or an integrated wireless backup solution that operates in conjunction with their traditional wireline services. Since Neptuno began its operations in the 3650-3700 MHz band, it has invested over \$6 million on its WiMax infrastructure and over \$4 million in equipment.

⁵ *Id.* at 6512 (¶¶ 28-29).

⁶ *Id.* at 6515 (¶ 36).

⁷ *See NPRM* at ¶ 77.

Here, the Commission has set forth a proposal that has two separate components. The first component proposes to create a Citizens Broadband Service in the 3550-3650 MHz band subject to the license-by-rule regime and composed of three tiers. Neptuno does not object to the general objective of promoting spectrum sharing and small cell deployment as part of the national effort to expand wireless broadband capabilities. Neptuno is deeply concerned, however, with the second component of the Commission's proposal: the integration of the 3650-3700 MHz band (and its current licensees) into the proposed Citizens Broadband framework. Under this supplemental proposal, current licensees will be converted into licensees in the third (and lowest tier) of the proposed Citizens Broadband Service framework—a tier where they would not have even the limited protections from interference that are currently available in the 3650-3700 MHz band and where, given the host of geographical exclusions and limitations being proposed in the *NPRM*, they would no longer be free to provide their services anywhere within their service area.

The concerns at this stage are various. First, Neptuno is concerned that the supplemental proposal to integrate the 3650-3700 MHz band into the proposed Citizens Broadband Service framework is too vague as to certain critical elements (and as to the implications of some of these elements) and to allow Neptuno to submit constructive comments. Second, Neptuno is concerned that, based on the information available and the limited understanding of the implications of the supplemental proposal, full integration of the 3650-3700 MHz band into the proposed Citizens Broadband Service framework would cripple the ability of Neptuno and others to continue to operate in the 3650-3700 MHz and provide the services that they offer now. Finally, Neptuno is concerned that the Commission's supplemental proposal, depending on how it is further tailored and implemented, may have the effect of modifying the terms of the licenses

that Neptuno and others obtained outside the context of the process established in 47 U.S.C. § 316.

Neptuno, like many others, invested in the 3650-3700 MHz band and is operating in that band to help fulfill the Commission's goal of expanding access to wireless broadband services. There is no reason to so overhaul the current 3650-3700 MHz band's regulatory regime in a manner that prevents current licensees from operating as they do now or that would leave them worse off than they are now. And while the Commission's goal of using the 3550-3650 MHz band to promote spectrum sharing and small cell deployment as tools to further expand access to commercial broadband services is commendable, there is no reason why it should take place at the expense of the progress that has been made in the 3650-3700 MHz band.

II. DISCUSSION

A. The Commission's Supplemental Proposal Is Too Vague As To Certain Critical Elements To Permit Informed Commenting By Current 3650-3700 MHz Licensees

The *NPRM* dedicates just six paragraphs (out of over one hundred and fifty paragraphs) to what has the potential of being a complete overhaul of the regulatory framework governing licensing and operation in the 3650-3700 MHz band—an overhaul that is being proposed only seven years after the Commission established the current 3650-3700 MHz framework and invited wireless internet service providers to invest in the band and expand the commercial wireless broadband services available to consumers in the United States. The *NPRM* leaves critical questions about the particulars and the implications of the supplemental proposal vague enough to prevent Neptuno and other 3650-3700 MHz licensees from determining with certainty whether the supplemental proposal will allow them to continue operating as they do now or would cripple their current operations. Constructive comments cannot be made under these circumstances.

First, the Commission's *NPRM* does not address directly or precisely the most critical concern that Neptuno and other 3650-3700 MHz licensees naturally have with the supplemental proposal: whether it will preclude (directly or indirectly) the ability to continue operating in the 3650-3700 MHz band, as they do now, under the terms of the licenses granted by the Commission. The *NPRM* does not state directly that current 3650-3700 MHz licensees will be allowed to operate as they do now in the contiguous block of spectrum that the Commission is proposing. Nor does the *NPRM* expressly state that 3650-3700 MHz licensees will *not* be allowed to continue to operate as they do now. The answer to that question depends to a large degree on guesswork regarding how critical elements of the supplemental may or may not eventually be filled out and implemented. Neptuno respectfully submits that any proposal that would so directly affect—and potentially impinge on—the operation of current licensees that have invested millions of dollars to provide the very services that the Commission expected them to deliver should be more certain and forthright.

Some of the basic doubts arise from the lack of details provided in the *NPRM* as it relates to the integration of the already populated and thriving 3650-3700 MHz band into what would be the new Citizens Broadband Service in the 3550-3650 MHz. For instance, the supplemental proposal suggests that, if the 3650-3700 MHz is integrated into the Citizens Broadband Service, current 3650-3700 MHz licensees would only be allowed to operate in High Power Operation Zones (“HPO Zones”).⁸ Little is known about these HPO Zones, however. The *NPRM* refers to them as a “subset” of Priority Access Zone,⁹ but it does not elaborate on what that would mean in practical terms. Indeed, there is no sense whatsoever from the *NPRM* as to how many HPO

⁸ *Id.* at ¶¶ 77-79.

⁹ *Id.* at ¶ 79.

Zones would exist or where they would exist. In the particular case of Neptuno, there is no indication whatsoever as to whether there will be any HPO Zones in Puerto Rico, thus leaving unclear whether Neptuno would be able to continue operate anywhere in its current service area. In other words, the missing details regarding the HPO Zone could mean anything from the total ruin of Neptuno's business to no change whatsoever, but Neptuno has no way of knowing today which one it is. This lack of clarity on such a critical component that could mean the life or death of Neptuno's business makes commenting difficult, if not impossible.

Substantial questions also remain as to the proposed interplay between the Incumbent Access tier proposed in the *NPRM* and current 3650-3700 MHz licensees. As it relates to the creation of the Citizens Broadband Service in the 3550-3650 MHz band, the *NPRM* proposes creating a first tier of users, referred to as the Incumbent Access Users, comprised of federal users (including high-powered radar systems) and grandfathered Fixed Satellite Service commercial users that would be protected from harmful interference generated by commercial users operating elsewhere in the Citizens Broadband Service framework.¹⁰ To protect these incumbent users, the *NPRM* proposes, among other things, creating geographic exclusion parameters, *i.e.*, geographic areas where only Incumbent Access Users would be permitted to operate anywhere in the 3550-3650 MHz band.¹¹ The *NPRM* suggests that users in the 3650-3700 MHz (including, presumably, current licensees) would be precluded from operating in those geographic zones.

Plainly, information regarding the existence and location of these geographic exclusion zones is critical to any thorough understanding of the effects of the Commission's supplemental

¹⁰ *Id.* at ¶ 65.

¹¹ *Id.* at ¶¶ 67-68; *id.* ¶ 111.

proposal on the entities currently licensed and operating in the 3650-3700 MHz band. The *NPRM* contains little definitive information on the location and scope of these geographic exclusion zones, however, thus forcing current operators only to speculate as to the effects of a proposal that, depending on its implementation, could completely prohibit current operations in the 3650-3700 MHz band or have no effect whatsoever on current 3650-3700 MHz licensees. In the case of Puerto Rico, where Neptuno operates, the map provided in the Figure 2 of the *NPRM* does not cover Puerto Rico at all, thus leaving Neptuno completely in the dark and making it impossible to have any sense as to how geographic exclusion zones could affect 3650-3700 MHz band operations in Puerto Rico.

The Commission's supplemental proposal likewise does not explain why these proposed geographic exclusion parameters should apply at all to current 3650-3700 MHz licensees. The users that the *NPRM* refers to as Incumbent Access Users operate today in the 3550-3700 MHz band without any indication that they have been affected by the operations of current licensees in the 3650-3700 MHz band. If these two categories of licensees currently co-exist in their respective bands without affecting their respective operations—and without geographic exclusions zones—it is unclear why exclusions zones would be needed in the 3650-3700 MHz band under the Commission's supplemental proposal. This is a critical point that deserves more attention from the Commission because any decision to extend to the 3650-3700 MHz band the regulatory framework being proposed for the 3550-3650 MHz band could have the effect of prohibiting current 3650-3700 MHz licensees from operating at all.

As it stands today, Neptuno and other licensees operating in the 3650-3700 MHz band are essentially forced to guess as to the true implications and extent of the Commission's supplemental proposal and whether—or to what extent—the supplemental proposal would affect

their very existence. More clarity is needed when dealing with proposal with such potentially dramatic consequences.

B. Based On The Limited Information Available, Adoption Of The Commission's Supplemental Proposal Could Cripple Neptuno And Others Already Operating In The 3650-3700 MHz Band.

Adding to Neptuno's concerns, certain elements of the supplemental proposal suggest that its adoption and implementation could cripple the operations of Neptuno and others similarly situated licensees. The first area of concern is the geographic exclusion zones that the Commission has proposed to protect Incumbent Access Users. If these exclusions zones are extended and applied to the 3650-3700 MHz band, Neptuno and many other licensees currently operating in the 3650-3700 MHz band would be completely precluded from continuing to operate in the geographic locations where they currently operate. The geographical exclusion zones being considered would cover some of the largest metropolitan areas in the United States as well as smaller cities and suburban areas. If these zones are implemented as proposed, significant swaths of land and population centers that currently benefit from wireless broadband services provided in the 3650-3700 MHz band will be deprived not only of the services that they enjoy today (including the last-mile services that Neptuno and others provide), but of new innovations in WiMax and similar technologies. This would be inconsistent with the Commission's goal of promoting broadband deployment and its previously stated objective of promoting investment and the deployment of technologies such as WiMax in the 3650-3700 MHz band.¹²

In the case of Puerto Rico, where Neptuno operates, these concerns are only magnified. As mentioned above, it is completely unclear how or to what extent exclusion zones would exist

¹² See *3650-3700 MHz Report and Order*, 20 FCC Rcd at 6503 (¶ 2); *id.* at 6511-13 (¶¶ 25-30).

in Puerto Rico. Given the size of Puerto Rico, however, it is not unreasonable to assume that the presence of a single high powered radar facility could lead to establishing an exclusion zone that would cover either the entire island or a significant portion of the island. If that is the case, expansion of the exclusion zones to the 3650-3700 MHz band would effectively declare Puerto Rico out of bounds for purposes of wireless broadband service in the 3650-3700 MHz band, thus crippling Neptuno, and would lead to the rollback of the service already being offered to numerous clients.

The second general area of concern relates to the possibility of allowing Priority Access Users to operate in the 3650-3700 MHz band under the framework proposed by the Commission for the Citizens Broadband Service. This would make operation by Neptuno and others in the 3650-3700 MHz band impractical, if not impossible. Under the Commission's three-tiered proposal, Priority Access Users would fall under a second tier comprised of "mission critical" users that would be afforded protection from harmful interference generated by other Priority Access Users and operators in the lower tier of the Citizens Broadband Service (*i.e.*, commercial users).¹³ As envisioned by the Commission, Priority Access Users would be limited to operating in a particular portion contiguous spectrum and would be able to operate facilities only in certain designated geographical areas.¹⁴

Expanding this Priority Access framework to the 3650-3700 MHz band could make it impossible for Neptuno and others to continue to provide commercial broadband services in the 3650-3700 MHz as they do now. The protections from harmful interference that would be afforded to Priority Access Users would make it impractical for operators like Neptuno to

¹³ *NPRM* at ¶ 70.

¹⁴ *Id.* at ¶ 72.

continue to provide point-to-point last-mile connectivity in the 3650-3700 MHz band, since the risk of interference from what could be numerous Priority Access Users would prevent Neptuno from guaranteeing the level of service and reliability that its customers expect from a last-mile provider of commercial broadband service. The consequences are even more crippling in the case for Neptuno, which operates in a dense area where the propagation of just a few Priority Access Users in the 3650-3700 MHz band could disrupt Neptuno's ability to provide reliable service. The Commission thus should ensure that any Priority Access tier implemented as part of the Citizens Broadband Service is limited to a band separate from 3650-3700 MHz band and under conditions where those currently operating in the 3650-3700 MHz are not forced to discontinue operating as they do now.

The third area of concern relates to the potential propagation of small cell operators in the 3650-3700 MHz band under a license-by-rule regime and without any obligations to mitigate harmful interference caused to other commercial operators is in the public interest. The *NPRM* proposes replacing the “licensed light” framework and limited interference protections of the 3650-3700 MHz band with the license-by-rule framework that it proposes to apply to general public users interested in participating in the Citizens Broadband Service in the 3550-3650 MHz band (under the General Authorized Access tier).¹⁵ Under this proposed framework, General Authorized Access users would not have an expectation of protection from harmful interference.¹⁶ Current 3650-3700 MHz licensees would be “reclassified” to General Authorized Access Users under the Citizens Broadband Service.¹⁷

¹⁵ *Id.* at ¶¶ 77-78.

¹⁶ *Id.* at ¶ 75.

¹⁷ *Id.* at ¶ 78.

The Commission should refashion this proposal to ensure that the propagation of small deployments (even if limited to the 3550-3650 MHz band) is done in a manner that does not affect the ability of current 3650-3700 MHz licensees to continue to operate as they do now. First, it is not clear that promoting the development of small cell deployments in the 3650-3700 MHz band is compatible with the protection and promotion of commercial broadband services, especially those based on WiMax technology, that are currently provided by incumbent 3650-3700 MHz licensees. The technologies used in these two types of deployment are different. The equipment that is deployed and the levels of power that are necessary to operate equipment are different. The network deployment is different, with WISPs like Neptuno often building a wider network aimed at providing last mile connectivity to a more expansive territory. Not surprisingly, the services provided to customers also are different. In short, while Neptuno has no objection to the Commission's reliance on small cell deployments to expand access to broadband service—especially in a band, such as the 3550-3650 MHz band, that is not currently being used to provide any commercial broadband services—the same cannot be said of the attempt to force-fit small cell deployment in an environment already thriving with alternative means to provide commercial broadband services.

Second, the propagation of numerous small cell deployments in the 3650-3700 MHz band, especially in dense geographical areas, could cause harmful interference at levels that would make both small cell deployments and the WiMax-based deployments of many WISPs current licensed in 3650-3700 MHz unworkable. If the Commission's supplemental proposal is implemented in the areas of Puerto Rico where Neptuno currently provides wireless broadband service, too many users operating too close to each other would be sharing a limited number of channels, thus degrading the quality of service of everyone involved. In this scenario, neither the

low power levels of the small cell deployment nor their lower gain would abate the harmful effects on Neptuno's network.

That the Commission's supplemental proposal would replace the current harmful interference protection framework of the 3650-3700 MHz with effectively no framework at all only heightens the concerns with harmful interference. Under the a framework like the one established by the Commission in the 3650-3700 MHz band, any operator wishing to operate in the band, at a minimum, would have the obligation to cooperate and avoid harmful interference. The Commission's proposal would lead to a multiplication of the number of operators using the same space while simultaneously lessening (to a dramatic degree) their obligations and duties as it relates to harmful intervention. This is a recipe for disaster in places like Puerto Rico.

The Commission should not put 3650-3700 MHz licensees, who have made significant investments in their network to advance the Commission's goal of access broadband services, in the position of having to exchange a spectrum-sharing regime with limited interference protection for a framework where more players would be participating under no obligation whatsoever to abate harmful interference to other commercial licensees. Neptuno urges the Commission to pursue measures that allow for small cell deployments in bands not currently used for those commercial purposes, but without affecting operations in a band (*i.e.*, the 3650-3700 MHz band) where investment and innovative mobile and fixed wireless broadband services are thriving and without completely overhauling the regulatory framework that has served that band well.

C. The Commission's Proposal Could Have The Effect Of Modifying The Licenses Held By Neptuno And Others In The 3650-3700 MHz Band

Neptuno also is concerned that, depending on how critical elements are defined and implemented, the Commission's supplemental proposal could have the effect of modifying the

terms of its license without first following the procedures set forth in 47 U.S.C. § 316. For instance, the Commission’s supplemental proposal, depending on how it is implemented, could lead to a situation where the interference protections originally granted to Neptuno are dramatically weakened, if not eliminated completely. While the Commission never afforded licensees the protections traditionally associated with exclusive licensing, it did assure licensees that they were subject to (and beneficiaries of) a mutual obligation to cooperate and avoid harmful interference. It appears possible, however, that the adoption of the supplemental proposal could lead to no protections whatsoever and no expectation of cooperation to avoid harmful interference.

Likewise, the geographic limitations that are contemplated in the supplemental proposal could lead to a modification of Neptuno’s license. As the Commission explained in the *3650-3700 MHz Report and Order*, licensees in the 3650-3700 MHz band could expect “to provide all allowable services anywhere within their service area at any time, consistent with whatever regulatory status they choose.”¹⁸ The Commission’s supplemental proposal could undermine this expectation, depending on how they are implemented. Full integration of the 3650-3700 MHz band into the proposed Citizens Broadband Service framework could have the effect of not allowing Neptuno to provide services “anywhere within its service area” if an Incumbent Access exclusion zone is established in Puerto Rico, if Primary Access Users are allowed to operate in the 3650-3700 MHz band, or if 3650-3700 MHz licensees are limited only to HPO Zones. The Commission should avoid the mere potential of modifications outside the procedures set forth in 47 U.S.C. § 316.

¹⁸ 20 FCC Rcd at 6515 (¶ 36).

III. CONCLUSION

For these reasons, Neptuno respectfully requests that the Commission take notice of the instant comments and rethink and modify its supplemental proposal to integrate the 3650-3700 band into the proposed Citizens Broadband Service framework. Neptuno respectfully submits that promoting small cell deployment and spectrum sharing in the 3560-3650 MHz band does not require a dramatic overhaul of the current 3650-3700 MHz regime in a manner that prevents current licensees from operating as they do now or that would leave them worse off than they are now.

Respectfully submitted,

NEPTUNO MEDIA, INC. D/B/A NEPTUNO
NETWORKS

By: /s/ Eduardo R. Guzmán
Eduardo R. Guzmán
Camillie Landrón
DRINKER BIDDLE & REATH LLP
1500 K Street N.W., Suite 1100
Washington, D.C. 20005
(202) 354-1373

February 20, 2013